

and ethnologists are eagerly awaiting some such work from the pen of Mr. A. M. Hocart, whose preliminary sketches give promise of so much to come.

The work under notice is, in its way, excellent. In his treatment of psychology the author does not follow the usual practice of accounting for the beliefs and practices of uncivilised folk by means of some extemporised psychological explanation. On the contrary, his work contains some of the soundest social psychology that it has been our good fortune to read for many a day. The author is keenly aware of the interrelationship of social institution and behaviour. For instance, he, along with the Rev. T. Williams, fails to detect any element of wonder in Fijian religion, but finds plenty of fear. He does not, however, claim that this fear has been aroused in the Fijian by his experience of natural phenomena; on the contrary, "the answer is to be found in his history and past social life." The Fijian race has had a warlike past, and the people have been at the mercy of cruel, warlike chiefs. "He knew what invasion meant, and he was a victim to the war-terror by night and day. . . . Fear was 'bred in his bone.' It is not wonderful, therefore, that fear came out in his religious life . . . at the present time, fear is inseparable from the Fijian nature, and . . . this fear is the result of his history and past social environment."

Again, in speaking of the moral character of the Fijian, Mr. Deane says: "Many people are led by erroneous or narrow conceptions of social life in general to forget that the Fijian's past is crystalised in his present social surroundings, and they proceed forthwith to pronounce judgment upon him as if he had had the same history as a European. The diagnoses of such people are, therefore, often unjust, caustic, and unscientific. For they take single threads of his character, and judge therefrom the warp and woof of all." In some capital chapters on the influence of social organisation on behaviour, the author sums up his method of inquiry in terms that reveal his attitude: "So far we have examined the Fijian character as *expressed* in certain religious beliefs, social customs, and ceremonial symbols. We shall now study it more directly as the *outcome* of particular social institutions." He proceeds forthwith to give an analysis of the effects of communism upon human behaviour that should be read by some of our individualists, as well as by the communists, for both will find there something to learn that will not entirely please them. Fijian communism has its good, as well as its bad, side.

It is interesting to note that the great increase

of warfare and cannibalism in Fiji was due to the introduction of firearms. Europeans have much to answer for in the matter of stirring up strife in various parts of the earth. "The ancient legends describe a peaceful immigration of a few half-shipwrecked and forlorn people. . . . It is not till long after that any serious war is even hinted at"—a state of things that is apparently typical of the early history of the Pacific.

Altogether a readable and eminently human book, with much reasoning on human behaviour far in advance of that usually found in ethnological literature.

W. J. PERRY.

Laboratory Designs.

Laboratories: Their Planning and Fittings. By A. E. Munby. With a historical introduction by Sir Arthur E. Shipley. Pp. xix+220. (London: G. Bell and Sons, Ltd., 1921.) 25s. net.

AN up-to-date compendium of experience in all that pertains to laboratory design and fittings is provided by this volume, which is well illustrated by plans and sketches of many of the latest buildings for scientific work in schools and colleges. It is accompanied by a criticism of different types, while useful suggestions will be found for making the best use of laboratories run on the more orthodox system of teaching science.

A perusal of the book will well repay those responsible for the extension of science teaching in our educational establishments, and will help to prevent those costly mistakes which, through insufficient knowledge of what has been done elsewhere, have in the past so often characterised the building of scientific laboratories. The publishers, as well as the author, are to be congratulated on the publication of a really useful book in handy size, well bound, and with excellent letterpress.

The first chapter, "The Scope and Inception of Building Schemes," deals with the factors which affect the ultimate design of the building. It is a suggestive presentation of the subject and a comprehensive analysis of the problems that must be considered before any plans can be set out.

Mr. Munby in no way attempts to define the actual requirements of any particular type of school or course of work. His book is intended rather to assist the designer in obtaining the best and most efficient equipment within the limit prescribed by funds available or methods of teaching. Naturally, this has led him to discuss details and designs for the most advanced courses in various branches of science with all the elabora-

tion of subdivision that is found in laboratories of university rank.

For schools a much simpler scheme of fittings is necessary; it is in connection with schools rather than with colleges that new buildings are likely to be required in the near future, although it is impossible to standardise their requirements. The author rightly points out that a great change is taking place in educational methods, and that natural science is likely in the future to become, at least in its elementary stages, more and more diffused into other school subjects, so that eventually every class-room may require special fittings, while the rôle of the laboratory as a thing apart may gradually disappear. Such evolution is well exemplified in the teaching of geography. Hence considerations such as these must materially affect all laboratory arrangements and must not be lost sight of in the development of any scheme embarked upon; provision must always be made for extension or adaptation.

The book is refreshingly free from bias; alternative plans are discussed, advantages and disadvantages pointed out, and it is wisely left to the reader to decide what to adopt, modify, or omit.

It is difficult to find any subject concerning the equipment of laboratories and lecture theatres omitted, no matter how trivial. Every possible fitting seems to be described, and the latest designs referred to, in addition to the many valuable hints as to the general arrangements of rooms, their accessibility, relative position, and organisation. Thus while the book itself is not so much constructive as descriptive, it will enable those upon whom is placed the responsibility of all future buildings for science teaching to have at hand a useful guide and trustworthy adviser.

Chap. 2 concerns the requirements of chemistry, chap. 3 those of physics, and chap. 4 those of biology and geology. In chap. 5 the supply of gas, water, steam, and electricity, the ventilation of fume cupboards and hoods, and the more detailed forms of drains are discussed.

The last chapter contains a good description of science buildings: (1) of recent school designs, (2) of recent designs for advanced work, and (3) of recent foreign designs.

Mr. Munby has ably presented his subject, the mass of detail and information being admirably arranged and indexed. The well-executed plans of the various types of laboratories drawn to scale will enable the reader to compare the merits of the various designs, and the many sectional drawings which illustrate points of special construction add much to the value of the book.

CHAS. E. BROWNE.

The History of Anatomical Illustration.

History and Bibliography of Anatomic Illustration in its Relation to Anatomic Science and the Graphic Arts. By Ludwig Choulant. Translated and edited, with notes and a biography, by Dr. Mortimer Frank. With a biographical sketch of the translator and two additional sections by Dr. F. H. Garrison and Dr. E. C. Streeter. Pp. xxvii + 435. (Chicago, Ill.: The University of Chicago Press; London: The Cambridge University Press, 1920.) 10 dollars net.

SCIENTIFIC books have short lives. A textbook that makes an especial appeal is sometimes edited and re-edited, and may last, in a form scarcely recognisable from its first state, for a generation or even for two. On the other hand, works containing new and original contributions are eagerly read for a short time, and their results rapidly absorbed into the pages of their successors. The older work then takes its place on the less accessible shelves of the library, and is sought from time to time only by the conscientious bibliographer. The ecological relationships of living and of dead literature may be compared to that of certain plant masses in which the upper surface alone is living and growth takes place on the hidden mass of dead vegetation.

It is the special and probably unique distinction of Ludwig Choulant (professor of medicine at Dresden, 1823-60) that he was the author of two works of reference that have remained in continuous, unedited, and constant use for man's allotted span. These works are, it is true, limited in range and used by few, but within their own field they stand as yet unrivalled and unchallenged. Choulant was a man without genius, but of wonderful erudition and sound judgment, and with a real gift for the most minute accuracy combined with great power of literary condensation. His "Handbuch der Bücherkunde für die ältere Medicin," first published in 1828, appeared in a new edition in 1842. This second edition is still by far the best and most complete bibliography of ancient medicine, and is an essential reference book in every medical library, and quite indispensable to the medical historian. It may be doubted if there has ever been printed another reference book in any field that exhibits such extreme accuracy. Knowledge has naturally advanced in the century that has passed since it first appeared, and there are, therefore, lacunæ in Choulant's work. But the constant use of the book for many years has never revealed to the present reviewer a single error that its author